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1101 Connecticut Ave. N.W., Suite 910, Washington, D.C. 20036

May 15, 2000

Ms. Magalie Roman Salas
Office of the Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
12th Street Lobby, TW-A325
Washington, DC 20554

Re: ***Ex Parte* Presentation**
WT Docket No. 96-86

Dear Ms. Salas:

On May 10, 2000, Tapio Heikkila, Paul Pettersson and Leo Fitzsimon of Nokia met with Tom Sugrue, Michael Wilhelm, Mark Rubin and Jeanne Kowalski of the Wireless Telecommunications Bureau. The purpose of the meeting was to discuss Nokia's views concerning the above-captioned proceeding. Nokia's views are reflected in the attached document, which was presented during the meeting.

Pursuant to Section 1.1206 of the Commission's Rules, an original and one copy of this letter are being filed with your office. Acknowledgement and date of receipt of this transmittal are requested. A duplicate of this letter is included for this purpose. If you should have any questions or need further information, please do not hesitate to contact me at (202) 887-5330.

Sincerely,

Leo R. Fitzsimon
Director, Regulatory and Industry Affairs
Nokia Inc.

Enclosure

cc: Tom Sugrue, Esq.
Michael Wilhelm, Esq.
Mark Rubin, Esq.
Jeanne Kowalski, Esq.

Nokia Presentation to the FCC on Digital Technologies for the 700 MHz Public Safety Band

May 10, 2000

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Contents

- Background on Nokia LMR business
- Future development of Land Mobile Radio
- 700 MHz band allocation
- Conclusions

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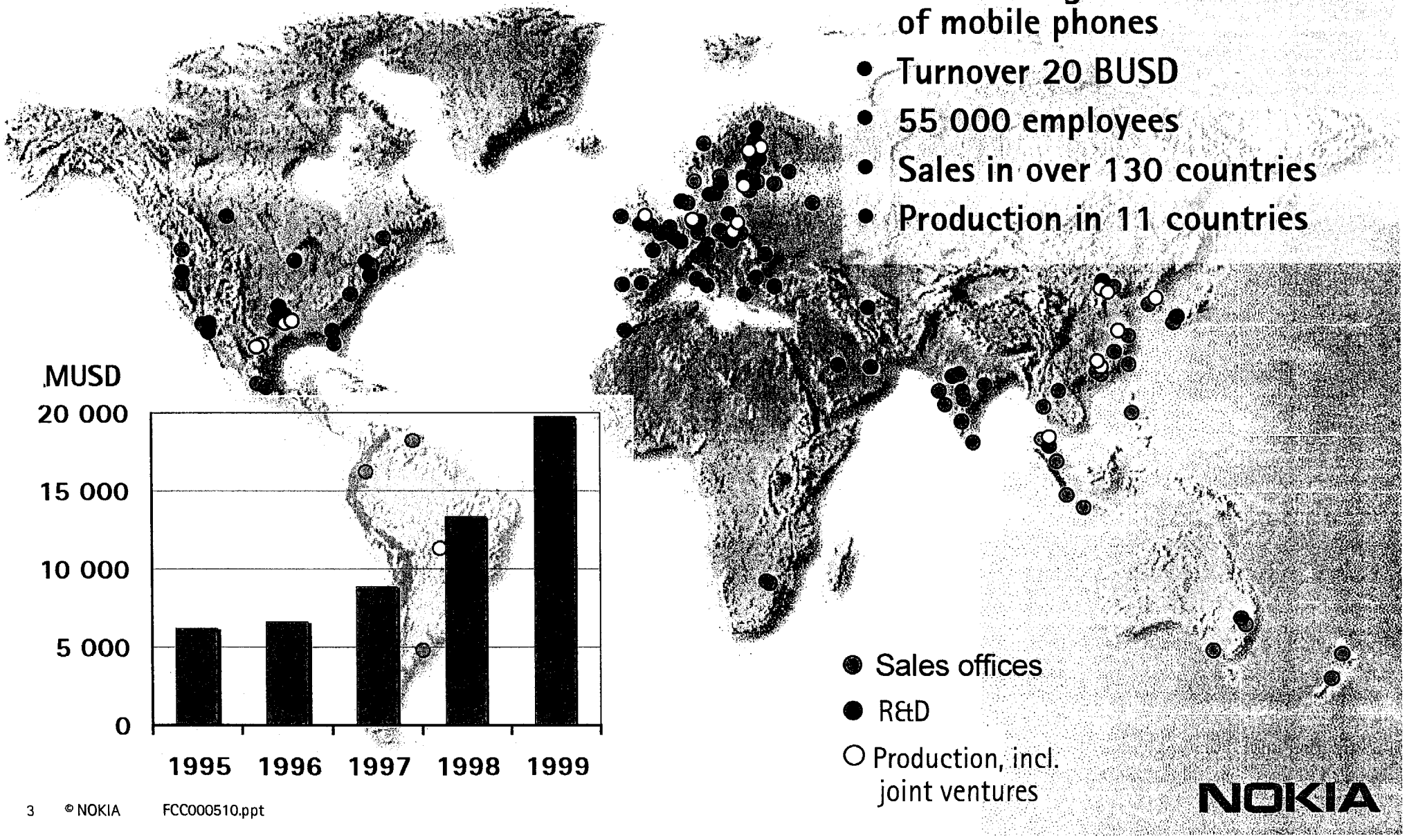
Global Nokia

- A leading telecoms end-to-end network system supplier
- World's largest manufacturer of mobile phones
- Turnover 20 BUSD
- 55 000 employees
- Sales in over 130 countries
- Production in 11 countries



Future of Land Mobile Radio

- Complex, cellular-like technology
- Larger, higher capacity networks
- Shared systems
- Service providers
- Industry consolidation

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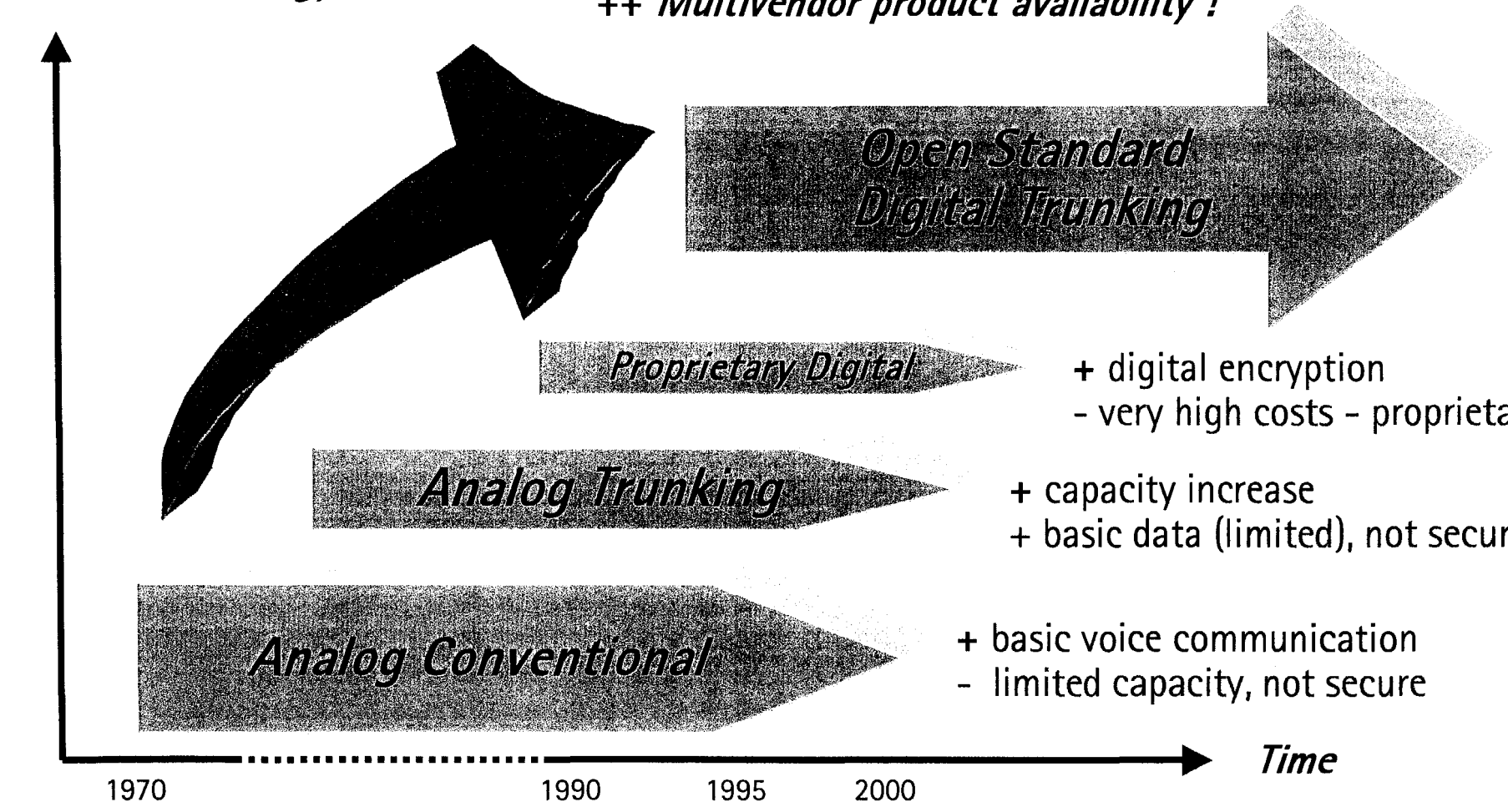
Development in Public Safety Radio

++ *Shared network - Virtual Private Network concept*
++ *High speed integrated data - IT connectivity !*
++ *Lower costs, standard based digital systems !*
++ *Multivendor product availability !*



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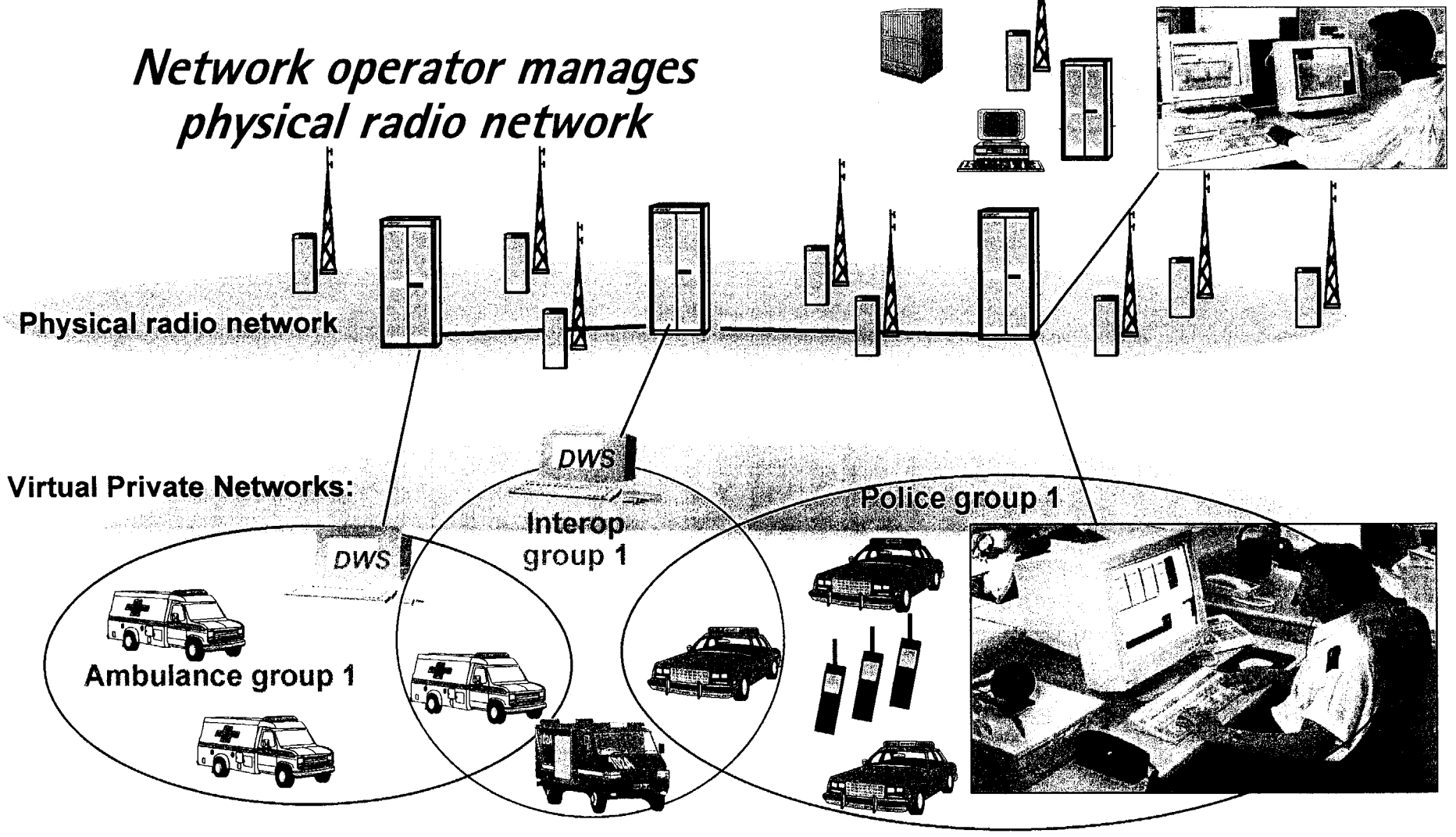
Shared networks for Public Safety

Network operator manages physical radio network



Dispatchers manage virtual private networks

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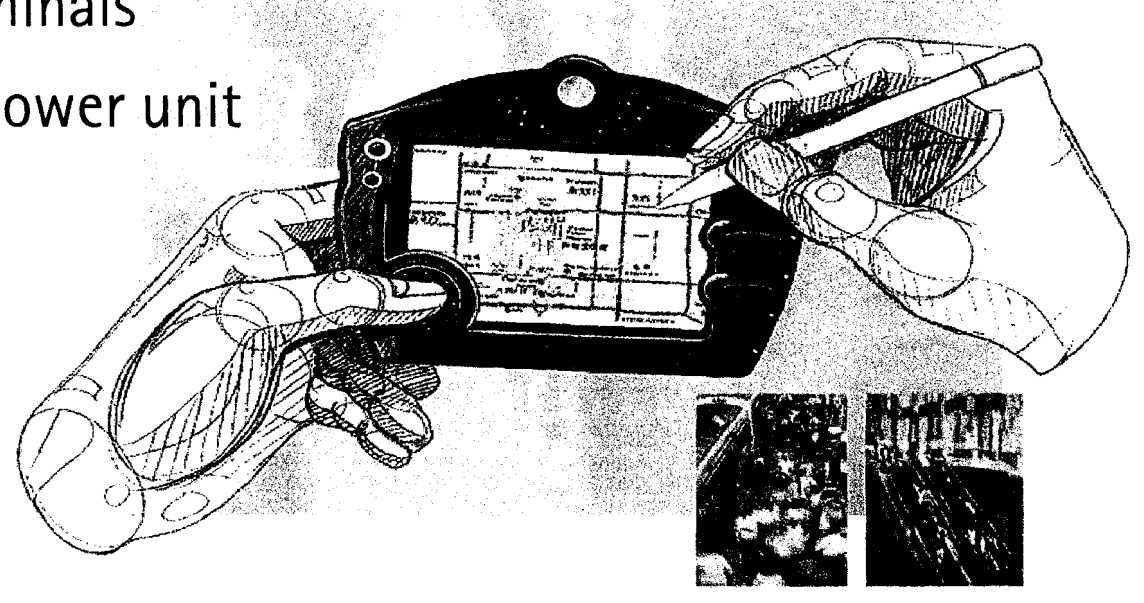
The commercial market drives the basic technology development - but the new technologies will be applied in special markets

- Smaller & lighter handsets
- Easy to use graphical user interfaces
- Reachability; personal terminals
- Faster development pace, lower unit cost
- WAP, Bluetooth, IP



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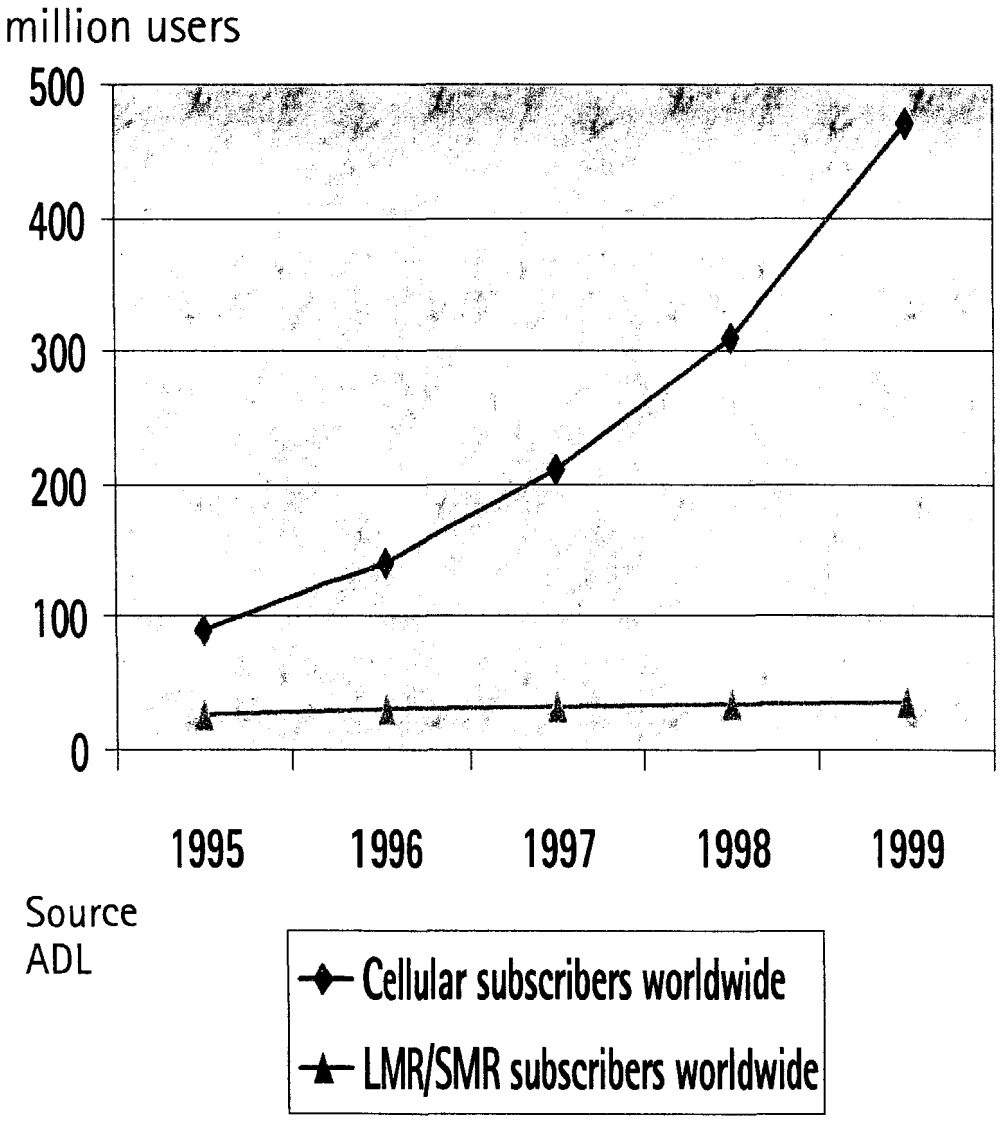
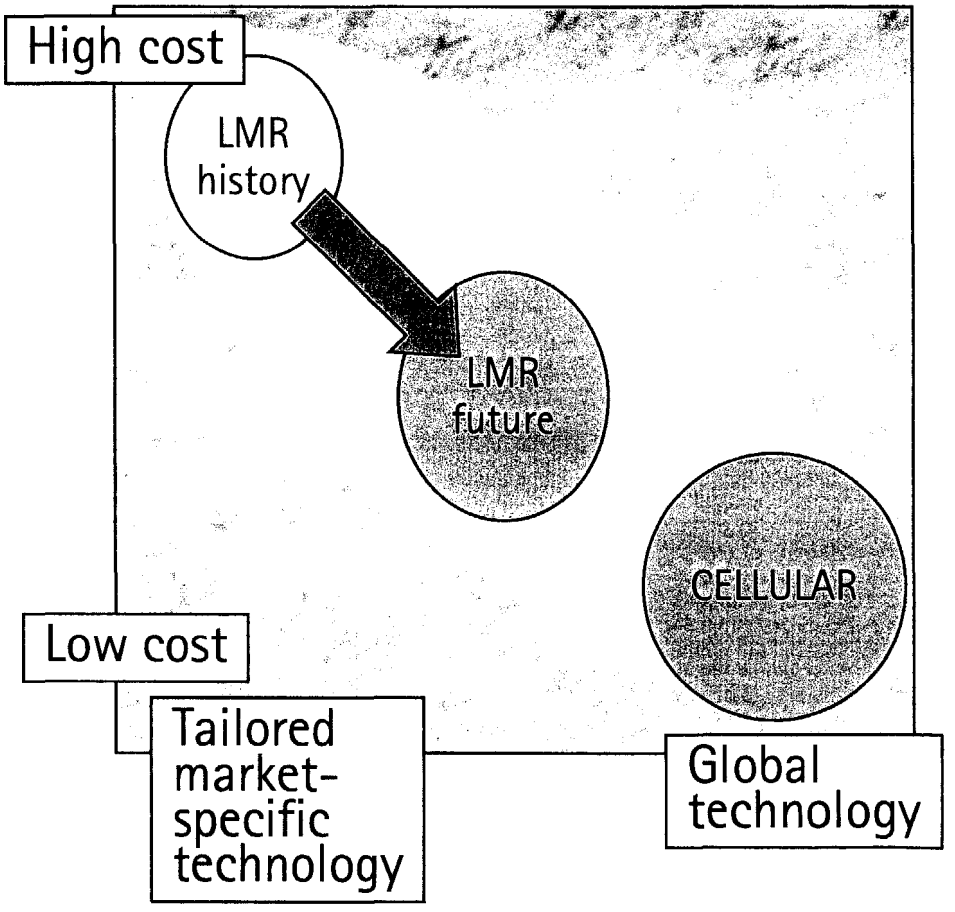
Globalization of Land Mobile Radio





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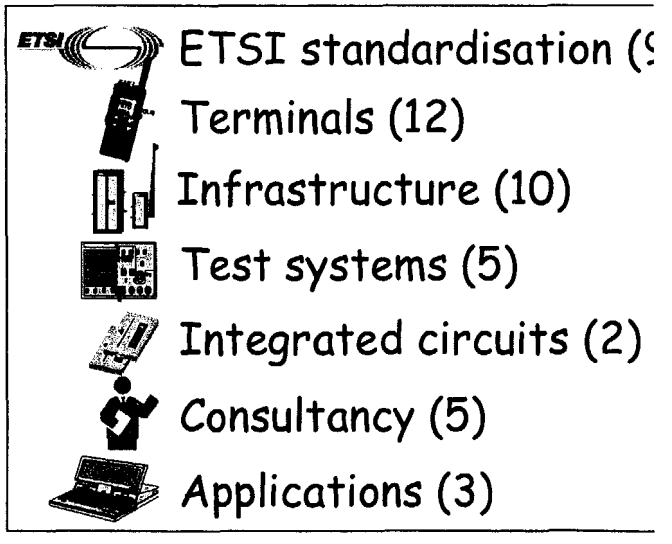
TETRA Supporters:

APD
ATMEL
BESCom
Cleartone
CML
Condat
Damm
DeTeWe
ETLEM
ICCC
ICOM
IFR Ltd.
Infomatrix
Kenwood

KTL
Marconi Communications
Matra Nortel
Motorola
Nokia
Panasonic
Rhode & Schwarz
Simoco / Frequentis
Tait
TCI
TeleDanmark
Teltronics
Terrafix
Uniden America



Source: TETRA News 4/99

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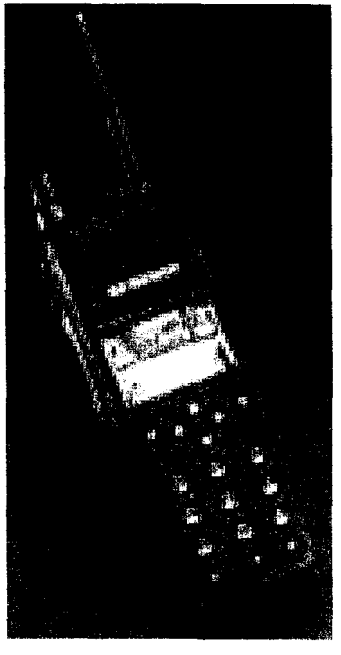
True multivendor support - today

TETRA interoperability demonstration at TETRA World Congress November 1999, Amsterdam:



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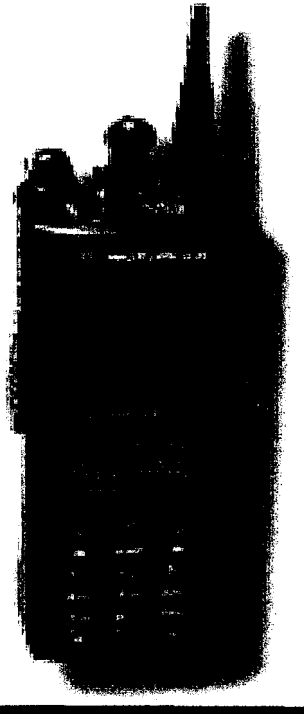
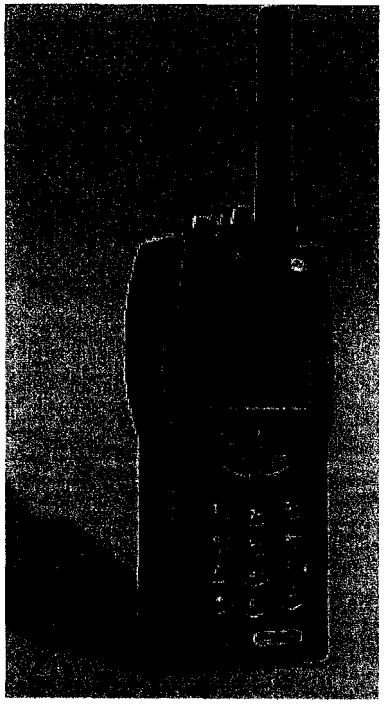


MOTOROLA



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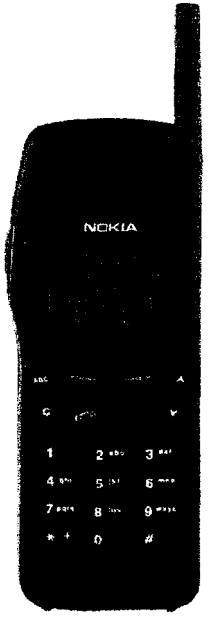

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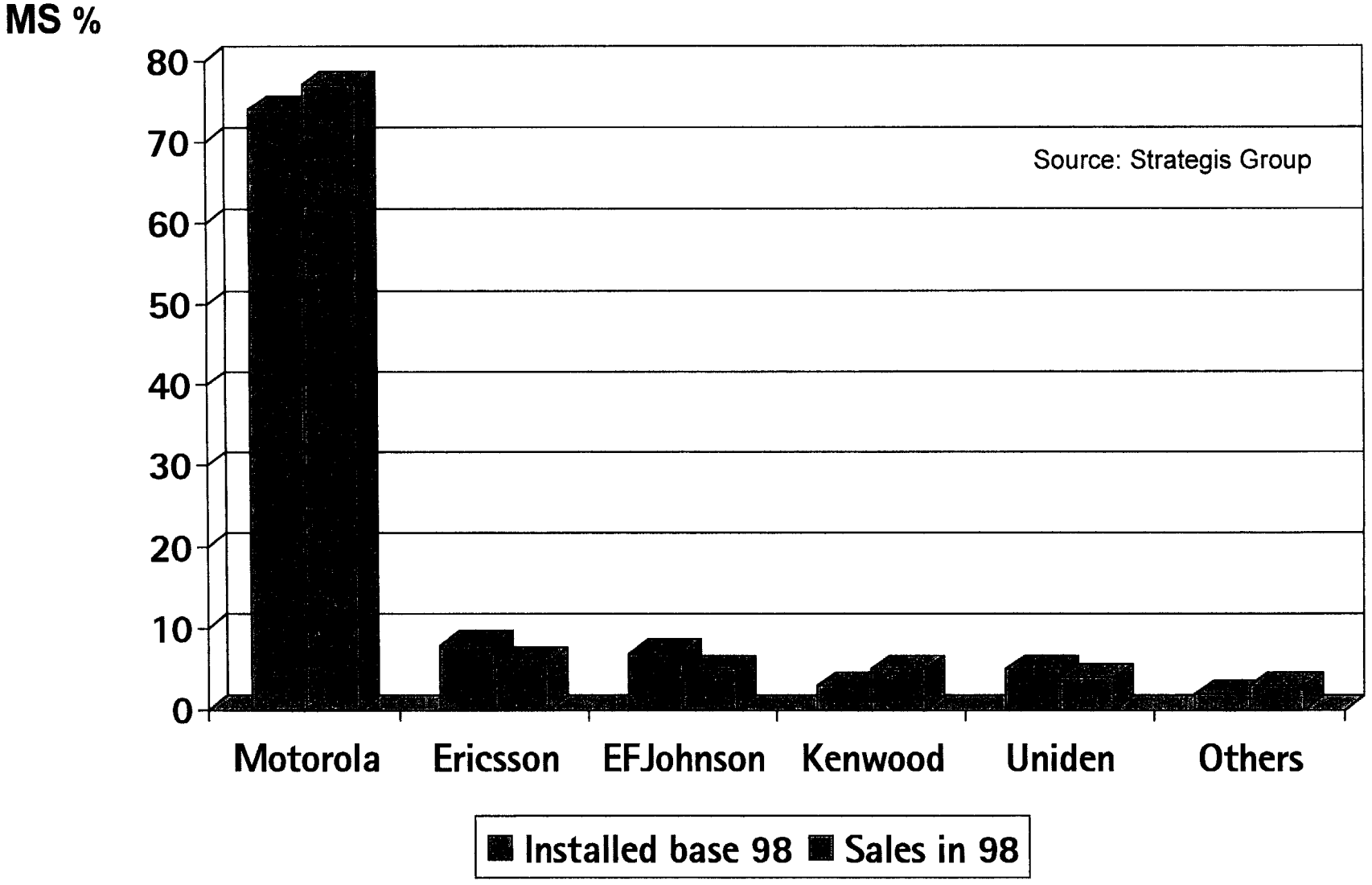
Infrastructure manufacturers' market share of Private Radio Systems in USA in 1998



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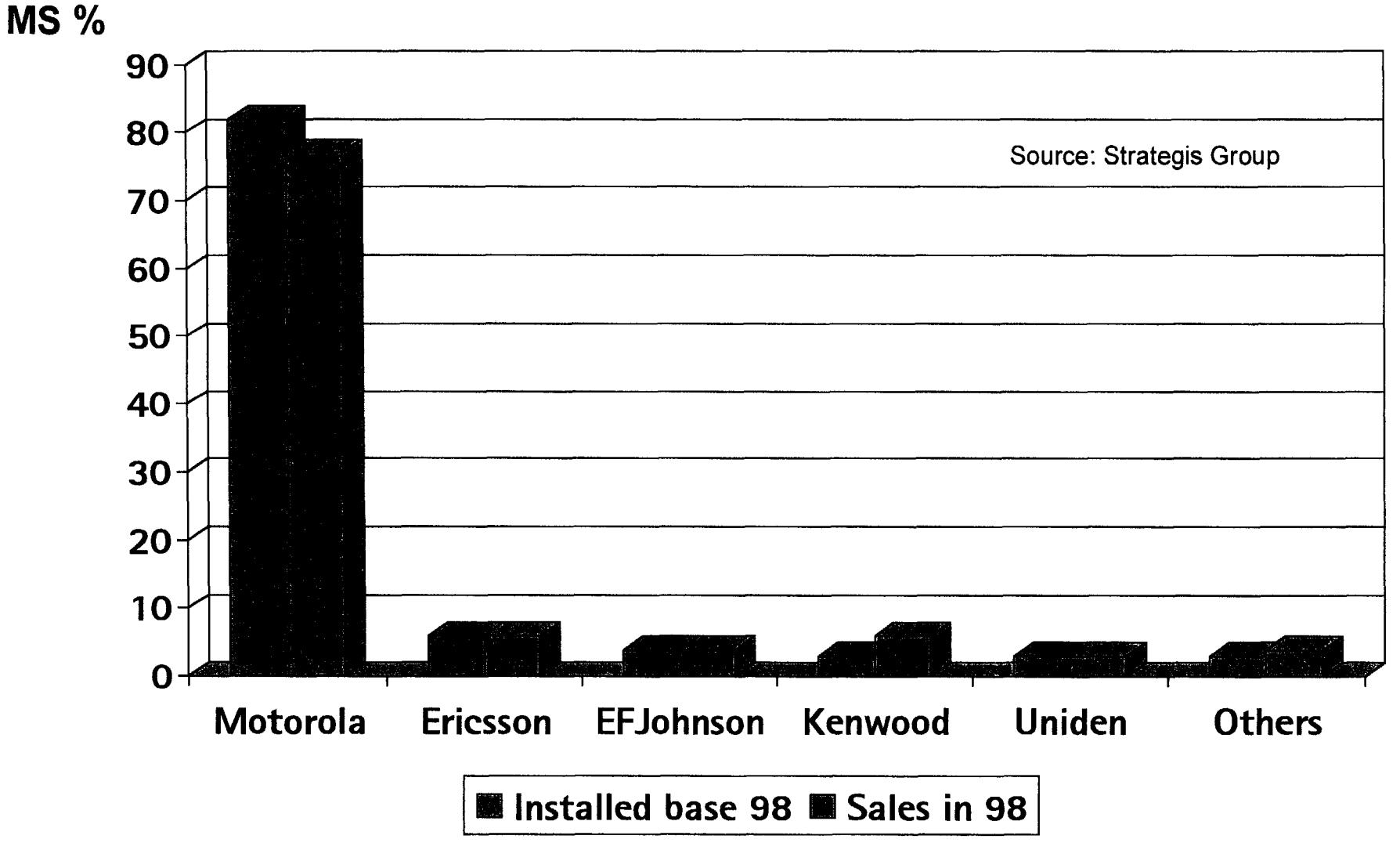
Equipment manufacturers' market share of Private Radio Terminals in USA in 1998



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Role of 700 MHz PSS allocation

- Current PSS frequency bands fragmented
- New allocation doubles the overall bandwidth
- Virgin band, no legacy, freedom of choice
- Unique opportunity to boost the development of PSS radio systems to new era
- FCC desire to have spectrum efficient 6.25 kHz technology in this band
- Regulation will dictate the industry development

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700 MHz PSS band must be designed for future - only 6.25 kHz technology should be allowed

- If 12.5 kHz technology were allowed to take over the new band, it would occupy the frequencies for at least a lifetime of systems (15-20 years).
- Regulation must be based on future technological capability with at least 20 years view, not based on today's status
- 6.25 kHz technology is available today from all major radio manufacturers, and it can be supplied at 700 MHz within the time schedule of planned projects.
- 800 MHz band is in most cases available for those projects that for any reason may need 12.5 kHz technology
- 6.25 kHz is state-of-the-art today: most new systems in other parts of the world are built today using 6.25 kHz technology

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6.25 kHz technology is comparable in performance to 12.5 kHz technology

- The linearization technology is developing rapidly and the performance of narrow-band radios will soon be comparable to wider band radios.
- To expedite the linearization technology development, adjacent channel requirements could be optimized to be as flexible as possible, taking into account that the band is all-digital.

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